



**PATENT** 

Attorney Docket No.: ADL-101

Customer No. 39,013

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of

Applicant: Cindy ORSER et al.

Application No.: 10/728,246

Filing Date: 4 December 2003

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

Confirmation Number: 8108

Title: DETECTION OF CONFORMATIONALLY ALTERED PROTEINS AND PRIONS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached Form PTO-1449. This Information Disclosure Statement is being filed before issuance of a first Office Action on the merits.

Additionally, Applicants would like to bring to the Examiner's attention the following copending U.S. patent applications, which the Examiner might find relates to similar subject matter:

U.S. Patent Application No. 11/030,300, filed 7 January 2005.

Copies of non-U.S. patent documents are attached.

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Applicants respectfully request that the Examiner consider the documents listed on the

attached Form PTO-1449 and indicate that they were considered by making appropriate notations

on the attached Form PTO-1449.

This submission does not represent that a search has been made or that no better art exists

and does not constitute an admission that each, any, or all of the listed documents are material or

constitute prior art. If the Examiner applies any of the documents as prior art against any claim

in the application and Applicants determine that the cited documents do not constitute prior art

under United States law, Applicants reserve the right to present to the Office the relevant facts

and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability

of the claimed invention over the listed documents, should one or more of the documents be

applied against the claims of the present application.

Please grant any extensions of time required to enter this paper and charge any required

fees to Deposit Account No. 502882.

Respectfully submitted,

Cindy ORSER et al.

Date: <u>28 October 2005</u>

By:

Matthew T. Latimer

Matte 7 Late

Reg. No. 44,204

MOAZZAM & LATIMER LLP 1474 North Point Village Center #320

Reston, VA 20194-1190

703-471-4856

matthew.latimer@moazzamlaw.com

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FOREIGN PATENT DOCUMENTS									
		Document Number	Date	Country	Class	Sub Class	Translation Yes or No		
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
	В1	Anantharamaiah, G.M., et al., "Studies of Synthetic Peptide Analogs of the Amphipathic Helix", J. Biol. Chem. 260(18):10248-10255, 1985.							
	В2	Anfinsen, C.B., "Principles that Govern the Folding of Protein Chains", Science 181(4096):223-230, 1973.							
	A1	Baba, M., et al., "Aggregation of α-Synuclein in Lewy Bodies of Sporadic Parkinson's Disease and Dementia with Lewy Bodies", Am. J. Patthology 152(4):879-885, 1998.							
	В3	Baker, D., "A surprising simplicity to protein folding", Nature 405:39-42, 2000.							
	A2	Booth, D.R., et al., "Instability, unfolding and aggregation of human lysozyme variants underlying amyloid fibrillogenesis", <i>Nature</i> <b>385</b> :787-793, 1997.							
	A3	Carrell, R.W. et al., "Conformational Disease", The Lancet 350:134-138, 1997.							
	B4	Chiti, F., et al., "Designing conditions for <i>in vitro</i> formation of amyloid protofilaments and fibrils", <i>Proc. Natl. Acad. Sci. USA</i> <b>96</b> :3590-3594, 1999.							
	В5	Daura, X., et al., "Reversible Peptide Folding in Solution by Molecular Dynamics Simulation", J. Mol. Biol. 280:925-932, 1998.							
	A4	Dobson, C.M., "Protein misfolding, evolution and disease", TIBS 24:329-332, 1999.							
Examiner				Date Considered					
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									

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<del>107</del> .									
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		Document Number	Date	Country	Class	Sub Class	Translation Yes or No		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)									
	A5	Dobson, C.M., "The structural basis of protein folding and its links with human disease", Phil. Trans. R. Soc. London B 356:133-145, 2001.							
	В6	Dobson, C.M. et al., "Kinetic studies of protein folding using NMR spectroscopy", Nature Structural Biology Suppl:504-507, July 1998.							
	A6	Epstein, F.H., "Molecular Basis Of The Neurodegenerative Disorders", New. Eng. J. Med. 340(25):1970-1980, 1999.							
	B7	Isenman, D.E., et al., "The Structure and Function of Immunoglobulin Domains", Proc. Natl. Acad. Sci. USA 72(2):548-552, 1975.							
	B8	Krawczak, M., et al., "Human Gene Mutation Database - A Biomedical Information and Research Resource", <i>Human Mutation</i> <b>15</b> :45-51, 2000.							
	A7	Lansbury, P.T., "Evolution of amyloid: What normal protein folding may tell us about fibrillogenesis and disease", <i>Proc. Natl. Acad. Sci. USA</i> 96:3342-3344, 1999.							
	В9	Levy, E., et al., "Stroke In Icelandic Patients With Hereditary Amyloid Angiopathy Is Related To A Mutation In The Cystatin C Gene, An Inhibitor Of Cysteine Proteases", J. Exp. Med. 169:1771-1778, 1989.							
	A8	Liao, Y-C.J., et al., "Human Prion Protein cDNA: Molecular Cloning, Chromosomal Mapping, and Biological Implications", <i>Science</i> 233:364-367, 1986.							
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	ОТНІ	ER DOCUMENTS	(Including A	uthor, Title, Date, Pertinent	Pages, Etc	c.)			
	A9	MacPhee, C.E., et al., "Chemical Dissection and Reassembly of Amyloid Fibrils Formed by a Peptide Fragment of Transthyretin", J. Mol. Biol. 297:1203-1215, 2000.							
	B10	Matouschek, A., et al., "Mapping the transition state and pathway of protein folding by protein engineering", <i>Nature</i> 340:122-126, 1989.							
	A10	Nguyen, J., et al., "Prion Protein Peptides Induce α-Helix to β-Sheet Conformational Transitions", <i>Biochemistry</i> 34:4186-4192, 1995.							
	A11	Oesch, B., et al., "A Cellular Gene Encodes Scrapie PrP 27-30 Protein", Cell 40:735-746, 1985.							
	A12	Perutz, M.F., "Glutamine repeats and neurodegenerative disease: molecular aspects", TIBS 24:58-63, 1999.							
	A13	Prusiner, S.B., et al., "Prion Protein Biology", Cell 93:337-348, 1998.							
	A14	Riordan, J.R., "Identification of the Cystic Fibrosis Gene: Cloning and Characterization of Complementary DNA", <i>Science</i> <b>245</b> :1066-1073, 1989.							
	A15	Salmona, M., et al., "Molecular determinants of the physicochemical properties of a critical prion protein region comprising residues 106-126", <i>Biochemical Journal</i> 342:207-214, 1999.							
	A16	Schatzl, H.M., "Prion Protein Gene Variation Among Primates", J. Mol. Biol. 245:362-374, 1995.							
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	A17	Soto, C., "Protein misfolding and disease; protein refolding and therapy", FEBS Letters 498:204-207, 2001.							
	B11	Speed, M.A., et al., "Polymerization Mechanism of Polypeptide Chain Aggregation", Biotechnology and Bioengineering 54(4):333-343, 1997.							
	B12	Speed, M.A., et al., "Specific aggregation of partially folded polypeptide chains: The molecular basis of inclusion body composition", <i>Nature Biotechnology</i> 14:1283-1287, 1996.							
	A18	Spillantini, M.G., "α-Synuclein in filamentous inclusions of Lewy bodies from Parkinson's disease and dementia with Lewy bodies", <i>Proc. Natl. Acad. Sci. USA</i> 95:6469-6473, 1998.							
	A19	Spillantini, M.G., "α-Synuclein in Lewy bodies" Nature 388:839-840, 1997.							
	A20	Stahl, N., et al., "Prions and prion proteins", The FASEB Journal 5:2799-2807, 1991.							
	B13	Surewicz, W.K., et al., "Infrared spectroscopic evidence of conformational transitions of an atrial natriuretic peptide", <i>Proc. Natl. Acad. Sci. USA</i> 84:7028-7030, 1987.							
	A21	Thomas, P.J., et al., "Defective protein folding as a basis of human disease", TIBS 20:456-459, 1995.							
	A22	Westaway, D., et al., "Distinct Prion Proteins in Short and Long Scrapic Incubation Period Mice", Cell 51:651-662, 1987.							
	A23	Prior, R., et al., "Selective binding of Soluble Aβ1-40 and Aβ1-42 to a Subset of Senile Plaques", Am. J. Pathology 148(6):1740-1756, 1996.							
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